

What is claimed is:

1. A video transmission apparatus in which an n (the n represents an integer of 2 or more) number of different video data are transmitted via a single transmission line from a plurality of video signal output section to a video display device, and on said video display device, said video data that is indicated by a video data switching device is selectively displayed, wherein

said video display device comprising;

- 10 a latch signal generation circuit for generating a latch signal for latching either one of said n number of different video data on said transmission line in accordance with a video switching signal output from said video data switching device, and
- 15 a latch circuit for latching a prescribed video data on said transmission line by said latch signal.

2. A video transmission apparatus in which an n (the n represents an integer of 2 or more) number of different video data are transmitted via a single transmission line from a plurality of video signal output section to a video display device, and on said video display device, said video data that is indicated by a video data switching device is selectively displayed, wherein

said video signal output section comprising;

- 25 a delay means for delaying a phase pulse for controlling a transmission timing of said video signal output section ($n-1$) times, and generating an ($n-1$) number of delay pulses, each delay time of which is different from one another, respectively, and

a latch circuit for latching a prescribed video data on said transmission line by an output signal output from said selector.

4. A video transmission apparatus in which an n (the n represents an integer of 2 or more) number of different video data are transmitted via a single transmission line from a plurality of video signal output section to a video display device, and on said video display device, said video data that is indicated by a video data switching device is selectively displayed, wherein

said video signal output section comprising;

- a delay means for delaying a phase pulse for controlling a transmission timing of said video signal output section ($n-1$) times, and generating an ($n-1$) number of delay pulses, each delay time of which is different from one another, respectively, and

- a selector for sequentially selecting a prescribed video data so as to perform time division of said n number of different video data in accordance with said phase pulse and said ($n-1$) number of delay pulses, and

said video display device comprising;

- a latch signal generation circuit for delaying a phase pulse for controlling a receiving timing of said video display device ($n-1$) times, and generating an ($n-1$) number of delay pulses, each delay time of which is different from one another, respectively,

a selector for selecting either one of said ($n-1$) number of delay pulses and said phase pulse in accordance with said video switching signal output from said video data switching

device, and

a latch circuit for latching a prescribed video data on said transmission line by an output signal from said selector.

- 5 5. A video transmission apparatus in which an m (the m represents an integer of 2 or more) number of different video data having a small picture-image size and a first number of pixels, and a video data having a large picture-image size and a second number of pixels, pixels number of which is m
- 10 times as great as said first number of pixels, are transmitted via a single transmission line to a plurality of video display devices, on a first video display device for displaying said video data having said first number of pixels, said video data that is indicated by a video data switching device is
- 15 selectively displayed, and on a second video display device for displaying said video data having said second number of pixels, said video data having said second number of pixels is displayed, wherein

said first video display device comprising;

- 20 a latch signal generation circuit for generating a first latch signal for latching either one of said m number of different video data on said transmission line in accordance with a video switching signal output from said video data switching device, and

- 25 a latch circuit for latching a prescribed video data on said transmission line by said first latch signal, and said second video display device comprising;

a latch signal generation circuit for generating a second latch signal for latching said video data having said

second number of pixels on said transmission line, and
a latch circuit for latching said video data having said
second number of pixels on said transmission line by said
second latch signal.

- 5 6. A video transmission apparatus in which an m (the
 m represents an integer of 2 or more) number of different video
data having a small picture-image size and a first number of
pixels, and a video data having a large picture-image size
and a second number of pixels, pixels number of which is m
10 times as great as said first number of pixels, are transmitted
via a single transmission line to a plurality of video display
devices, on a first video display device for displaying said
video data having said first number of pixels, said video data
that is indicated by a video data switching device is
15 selectively displayed, and on a second video display device
for displaying said video data having said second number of
pixels, said video data having said second number of pixels
is displayed, wherein

said first video display device comprising;

- 20 a latch signal generation circuit for delaying a phase
pulse for controlling a receiving timing of said video display
device m times, and generating an m number of delay pulses,
each delay time of which is different from one another,
respectively,

- 25 a selector for selecting either one of said m number
of delay pulses in accordance with said video switching signal
output from said video data switching device, and

a latch circuit for latching said video data having said
first number of pixels on said transmission line by an output

signal from said selector, and

said second video display device comprising;

a latch signal generation circuit for delaying a phase
pulse for controlling a receiving timing of said video display
5 device (m-1) times, and generating an (m-1) number of delay
pulses, each delay time of which is different from one another,
respectively,

an OR circuit, input signals of which are said phase
pulse and said (m-1) number of delay pulses, and

10 a latch circuit for latching said video data having said
second number of pixels on said transmission line by an output
signal from said OR circuit.